

Notes on the Chinese *Eutropha*

(Insecta, Diptera, Chloropidae) *

By Ding Yang ** and Chi-kun Yang

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The genus *Eutropha* is recorded from China for the first time and it includes a new species which is described here. A key to the Chinese species of the genus is also presented.

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Introduction

Until now the genus *Eutropha* contains 21 species in the world, 7 Oriental (Sabrosky 1977), 9 Palaearctic (Kanmiya 1983, Nartshuk 1984), 5 Afrotropical (Sabrosky 1980, Nartshuk 1984), and 5 Australian (Sabrosky 1989), of which 2 species are common in the Oriental and Australian regions, 3 species in the Palaearctic and Afrotropical regions. Four species are known from Taiwan, but no species has been known to occur in continental China. There are several generic and specific revisional works on the genus *Eutropha*: Sabrosky (1972), Andersson (1977), Kanmiya (1983), and Spencer (1986).

In this paper one species of the genus *Eutropha* from southern China is described as new to science. The types of the new species are deposited in the Insect Collections of the Beijing Agricultural University, paratypes are stored at the Zoologische Staatssammlung München.

Genus *Eutropha* Loew

Eutropha Loew, 1866, Z. Ent. Breslau, 15 (1861): 26. Type species: *Chlorops fulvifrons* Haliday, 1833.

Pseudoformosina Malloch, 1938, Proc. Linn. Soc. N.S.W., 63: 355. Type species: *Chlorops nicobarensis* Schiner, 1868 [= *E. noctilux* (Walker, 1859)].

Diagnosis. Head as high as long. Eyes oval, bare or sparsely piled, with long axis oblique or nearly horizontal. Gena usually wider than 3rd antennal segment; parafacial indistinct or narrow. Frons somewhat projecting beyond eyes; frontal triangle shiny and smooth, its apex reaching to the middle or near the anterior margin of frons. Face concave, with a narrow facial carina, reaching to the middle of face. Antenna short, with 3rd segment square, slightly rounded, about as wide as long; arista usually shorter than 3rd segment, its basal segment rather thick. Ocellar bristles (oc) proclinate and divergent; posterior vertical bristles (pvt) proclinate, somewhat convergent, and shorter than oc; orbital bristles (orb) 5-7; outer vertical bristle (vte) and inner vertical bristle (vti) subequal. Thoracal mesonotum moderately convex, shiny or grayish white pollinose; humeral bristle (h) indistinct; 1 + 2 notopleural bristles (npl); 1 anterior postalar bristle (a pa), 1 posterior postalar bristle (p pa), 1 dorsocentral bristle (dc). Scutellum rounded, weakly convex on disc; apical scutellar bristles (ap sc) short and convergent,

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subapical scutellar bristles (sap sc) rather short. Mesopleura bare. Mesotibia with a black apical spur; tibial organ present.

Key to the species of *Eutropha* from China

1. Frontal triangle shiny yellow 2.
– Frontal triangle shiny brown or black..... 3.
2. Mesonotum shiny yellow with 3 shiny black stripes. Taiwan *flavofrontata* (Becker)
– Mesonotum dull grayish yellow with 3 brown stripes. Taiwan *farinosa* (Becker)
3. Antennae yellow except for upper surface brown or black; gena wider than 3rd antennal segment 4.
– Antennae wholly black; gena distinctly narrower than 3rd antennal segment. Yunnan
..... *ruiliensis*, spec. nov.
4. Mesonotum mostly shiny black. Taiwan; Australia *nigroscutellata* (Becker)
– Mesonotum dull reddish gray with shiny black stripes. Taiwan *oldenbergi* Duda

Eutropha farinosa (Becker)

Chlorops farinosa Becker, 1911, Ann. Hist. nat. Mus. Natl. Hung. 9: 65. Type-locality: Takao, Taiwan.
Distribution: Taiwan.

Eutropha flavofrontata (Becker)

Chlorops flavofrontata Becker, 1911, Ann. Hist. nat. Mus. Natl. Hung. 9: 64. Type-locality: Takao, Taiwan.
Distribution: Taiwan.

Eutropha nigroscutellata (Becker)

Assuania nigroscutellata Becker, 1911, Ann. Hist. nat. Mus. Natl. Hung. 9: 81. Type-locality: Townsville, Queensland.
Distribution: Taiwan; Australia.

Eutropha oldenbergi Duda

Eutropha oldenbergi Duda, 1934, Arb. Morph. Taxon. Ent. Berl. 1: 58. Type-locality: Anping, Taiwan.
Distribution: Taiwan.

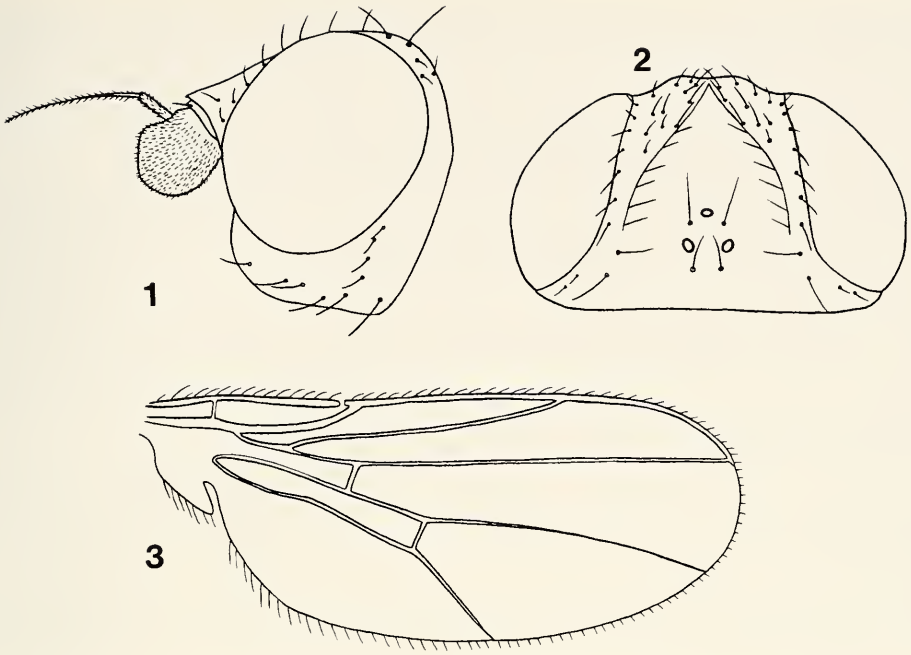
Eutropha ruiliensis, spec. nov.

Figs 1-6

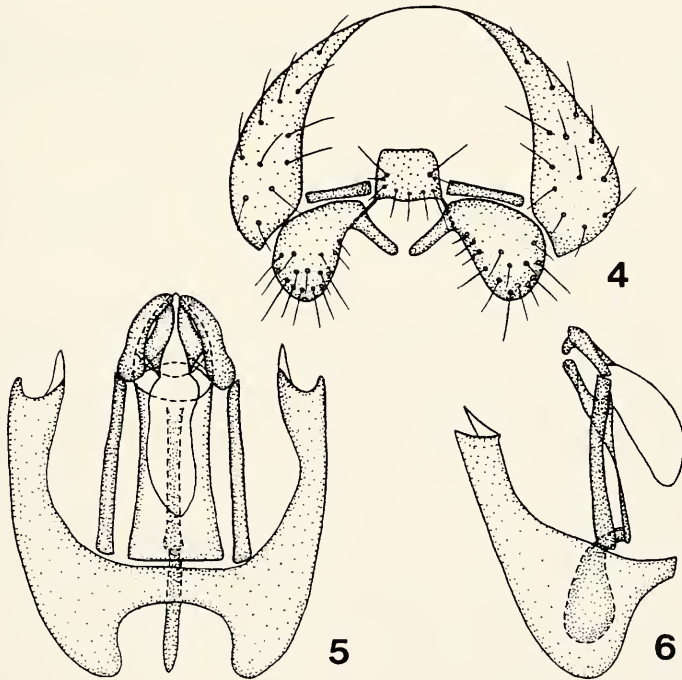
Types. Holotype: ♂, Ruili (750 m), Yunnan, 2-5.V.1981, Fasheng Li. - Allotype: ♀, same data. - Paratypes: 3 ♀, same data; 3 ♀ ♀, Ruili (750 m), Yunnan, 1.V.1981, Chi-kun Yang.

Description. Body length ♂ 1.7-1.9 mm, ♀ 1.7-2.1 mm; wing length ♂ 1.6-1.8 mm, ♀ 1.6-1.9 mm.

Head. Yellow with heavy grayish white pollinosity; occiput wholly brownish black; frontal triangle shiny black, ocellar tubercle heavily grayish white pollinose; eye sparsely short haired, its long axis oblique. Head 1.0-1.1 times higher than long; eye 5.0-5.5 times as high as gena width; gena 0.5-0.6 times



Figs 1-3. *Eutropha sinensis* Yang & Yang, spec. nov. 1. Head, lateral view. 2. Head, dorsal view. 3. Wing.



Figs 4-6. *Eutropha sinensis* Yang & Yang, spec. nov. 4. Male genitalia, posterior view. 5. Hypandrium and aedeagal complex, ventral view. 6. Hypandrium and aedeagal complex, lateral view.

as wide as 3rd antennal segment; parafacial indistinct; face distinctly concave, with an indistinct facial carina, reaching to the middle of face. Clypeus blackish. Bristles and hairs on head black, but gena and oral margin with yellow hairs; 6-7 orb; oc curved forward, longer than pvt; vte subequal to vti. Antenna brownish black and heavily grayish white pollinose, with 3rd segment as wide as long; arista longer than antenna, 1.9-2.0 times as long as 3rd antennal segment, and brown with short brown hairs. Proboscis brownish with pale yellow hairs; palpi yellowish with pale yellow hairs.

Thorax. Brown to brownish black with heavy grayish white pollinosity; mesonotum brownish with 3 broad black stripes which are coalescent and appearing predominantly black; scutellum brown, 1.8-2.0 times as wide as long; sap sc 0.5-0.6 times as long as scutellum, ap sc 1.3-1.4 times as long as scutellum. Pleura brownish yellow, but lower portion of mesopleura, antero-lower portion of pteropleura, median portion of sternopleura subshiny blackish; hypopleura black. Hairs and bristles on thorax black, but sternopleura with pale hairs. Legs yellow to brownish yellow; femora brownish yellow with basal portion yellow; anterior and posterior tibiae brown with base dark yellow; anterior and posterior tarsi wholly brown, median tarsi with apical portion brown; mesotibiae with a black apical spur which is subequal to diameter of tibiae; tibial organ oval and elongate. Hairs on legs chiefly pale. Wing hyaline, 2.4-2.5 times as long as wide; crossvein r-m at basal 0.6 times length of discal cell; R_{4+5} nearly straight, M_{1+2} weakly convex forward. Haltere stem brownish yellow, knob creamy white.

Abdomen. Brown to brownish black with grayish white pollinosity; hairs on abdomen chiefly pale. Male genitalia (Figs. 4-6): Epandrium with a large posterodistal opening; surstylus thick, its apical portion curved and finger-like, with a separate narrow basal sclerite; pregonite very elongate, postgonite rather short.

Remarks. This new species is characterized by having the gena rather narrow and the arista distinctly longer than the 3rd antennal segment. It can be separated from *nigroscutellata* and *oldenbergi* by having the antenna wholly black.

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